treatment. Reimbursement shall be made by the contractor to the Naval Regional Medical Center Collection Agent upon receipt of statement.

3.5 Storage Racks. The Storage Racks shall be of two (2) types, Cantilever and Push Back. Sizes and capacities are identified in Table 1. All racks shall be seismically anchored at the floor and ceiling. Anchoring method shall be designed by a licensed structural Engineer.

3.5.1 Cantilever Racks.

a. 1 (One) group, nine (9) bays
b. 0.250 inch thick sheet metal decks across arms (4 levels only)

3.5.2 Push Back Racks.

a.----------3 (three) groups, 18 single wide bays each, 4 deep
b.----------All levels shall have pushback lanes and carts

3.6 Fire sprinkler system. Bldg. 368 has an existing dry pipe fire suppression system however; it may not adequately protect the planned stored materials. A wet pipe fire sprinkler system shall be installed to NFPA 13 (Standard for the Installation of Sprinkler Systems), NFPA 72 (Fire Alarm Code), and NFPA 101 Life Safety Code. The contractor shall connect to an existing 8 (eight) inch water main located just east of the building running north and south, and bring the water pipe into the building for the wet pipe system. The sprinkler system shall be designed by a registered fire protection engineer, and installed by licensed fire protection installers.

3.7 Sizes and capacities. The equipment supplied under the requirements of this specification shall conform to the dimensions, sizes, and capacities specified in Table I.

TABLE I. Sizes and Capacities

Cantilever Racks	
Dimensions (maximum)	16 ft. High x 4 ft. Wide x 5 ft. arm length
Arms per upright (maximum)	5
Capacity (per arm, minimum)	3,500 pounds (static)
Push Back Racks	
Dimensions (maximum)	20 ft. High x 4 ft. 6 inches deep
Beam levels (per bay)	4
Capacity (per pair, minimum)	4,032 pounds (static)

3.8 Performance. The Storage Racks shall consist of, but is not limited to the described principal components, attachments and accessories necessary to meet the operational and performance requirements specified herein.

3.9 Standard equipment. All standard equipment required for proper operation of the Storage Racks (such as special tools) shall be furnished.

3.10 Marking on panels, and plates. All plates shall be permanently affixed to the equipment. All words on plates shall be in the English language. Characters shall be engraved, etched, embossed, or stamped in boldface on contrasting background. All plates shall be corrosion resistant.

3.10.1 Caution and warning plates. Caution and warning plates shall be affixed to the equipment in visible locations.

3.10.2 Manufacturer's identification plate. A nameplate shall be affixed to the Storage Racks. The nameplate shall contain the following information:

a.----------Nomenclature
b.----------Manufacturer's name
c.----------Manufacturer's model designation
d.----------Manufacturer's serial number
e.----------Contract number

3.10.3 PCB label plate. A label plate containing the PCB Certification information shall be affixed in the vicinity of the manufacturer's identification plate.

3.11 Technical data. Three (3) hard copies and one searchable electronic copy(s) of technical data shall be provided with the Storage Racks. All copies of technical data shall be legible and written in the English language. Each binder cover shall include in bold type the manufacturer's name, contract number, and model number. The manuals shall provide instructions, illustrations, and other associated data for operations, maintenance, repair, overhaul, including a complete catalog of parts used in the assembly of the end item. The manuals provided shall contain complete instructions and information for all equipment, components, assemblies, subassemblies, attachments, including the fire sprinkler system. The contents of a complete set of technical manuals shall include, as a minimum, the following:

a.----------Maintenance, service, and overhaul instructions including all preventive maintenance schedules and lubrication chart
b.----------Parts list containing: illustrations, part numbers, part nomenclature, original manufacturer, cross reference numbers, and recommended spare parts including quantities
c.----------Energy control procedure, in accordance with 29 CFR 1910.47, OSHA Energy Control Standard to bring the fire sprinkler system to a zero energy state for service and maintenance
d.----------All mechanical and electrical schematics showing discrete components/block diagrams/wiring diagrams with inputs and outputs identified/system electrical interface documents and drawings for the specific model of fire protection system supplied
e.----------All final "as built" contract drawings shall be provided on standard CD or DVD disc(s). The format of the drawing files shall be in AutoCAD. Files shall have "DWG" or "DXF" extensions in version 2010 or older. Contractor may request to supply drawings in an alternate file format if desired and approved by the Government.

3.11.1 Preliminary installation plan (PIP) with layout drawings. Within 30 days of the effective date of the contract, the contractor shall submit a preliminary installation plan (PIP), layout drawings, and a plan of actions with milestones (POAM) detailing key events.

3.11.1.1 Drawings shall show component locations including floor space and loading requirements, engineering calculations, location of utility connection(s), (power, air, etc.), indicate all equipment requiring energy lockout devices and any other utility requirements necessary for the proper installation of the Storage Racks and proposed equipment. Drawings shall provide a list of component manufacturers and model numbers.

3.11.1.2 The drawings shall indicate the full load amps (FLA) requirement to support all proposed equipment in its fully configured and operational state including all accessories.

3.11.1.3 The plan and drawings shall be reviewed for compliance to this specification by the Government user prior to the shipment of any equipment or the start of any site work.

3.11.1.4 The POAM shall include, as a minimum, the following schedules; design, manufacturing, equipment delivery, equipment set-up, OSHA Approved Certification, training, and final completion date.

3.11.1.5 The Government will notify the contractor in writing within ten (10) working days of receipt of the plan and drawings if they comply with this specification and if shipment can begin.

3.11.1.6 If revisions are required to the plan or drawings, the contractor has ten (10) working days to revise the plan/drawings and resubmit them for a new review.

3.11.1.7 If further comment rounds are required, both contractor and Government shall continue to reply within ten (10) working days.

3.11.1.8 Government review and/or approval of submittals, certifications, and schedules do not relieve or reduce the contractor's obligation to comply with all contract requirements.

3.11.2 OSHA approved certification. After equipment delivery and installation, and prior to testing, the contractor shall provide an OSHA Certification Report for review and approval by the Environmental, Safety, and Health Department at the Receiving Activity. Failure to provide this certification will delay acceptance of the equipment, and could result in rejection for failure to comply with the terms of the contract. The equipment shall be listed or approved, and labeled by one of the following methods:

3.11.2.1 The equipment specified herein shall be listed and labeled by an OSHA recognized and approved nationally recognized testing laboratory (NRTL). Test data reports shall be provided.

3.11.2.2 The equipment and its installation specified herein shall be field inspected, approved, and labeled by an OSHA recognized and approved NRTL. Test data reports/field evaluation reports shall be provided.

3.11.3 Calibration certification (if applicable). Contractor shall calibrate the equipment and all precision measuring devices after installation and prior to training. The contractor's commercial calibration laboratory shall be accredited by an accrediting body approved by Naval Sea Systems Command to be in compliance of ISO/IEC 17025 or ANSI/NCSL Z540.3. Reports of calibration shall be provided, and indicate the standards used for verification are traceable to the National Institute of Standards and Technology (NIST). The contractor shall provide calibration control instructions for each calibrated item.

3.11.4 Descriptive literature. Descriptive literature shall be furnished in sufficient detail to show that the proposed design will meet these specifications. Vendor submittals shall include the following:

a. ----------Make and model with catalog cut sheets for the cantilever style storage racks
b. ----------Make and model with catalog cut sheets for the push back style storage racks
c. ----------Assembly sketches with critical dimensions
d. ----------Certifications for the Fire Protection Engineer
e. ----------Certifications for the fire protection system installer
f. ----------Anchoring system design at floor and ceiling

3.12 Installation. Installation shall be the responsibility of the contractor. The contractor shall provide all the personnel, tools, and equipment to necessary to off-load, move, assemble, install, connect utilities, and make the equipment operable. The contractor shall provide excavation, earth moving, lifting, and transport equipment. All work shall be performed in conformance with 29 CFR 1910, 29 CFR 1915, and 29 CFR 1926. The work shall be executed in a manner and at such times to cause the least practicable disturbance to the occupants in the buildings and normal activities of the Receiving Activity. The contractor shall coordinate the site preparation and delivery of materials in a manner which causes minimum disturbance/interference with the Receiving Activity's normal business routine. The contractor shall provide a completely operational system(s) capable of meeting the inspection and test requirements of section 4. The contractor shall provide all materials, tools, gages, and instrumentation necessary to perform the required tests. The contractor shall instruct the carrier that the equipment shall be off-loaded only under the supervision of a representative of the contractor.

3.12.1 Excavation or drilling. An excavation permit request form will be provided to the contractor by the Government. The contractor shall provide a subsurface locate service of the installation site to locate and identify subsurface interference(s) prior to any excavation or drilling. A copy of the subsurface interference survey report and a completed excavation permit form shall be provided in electronic format for review and approval by the Receiving Activity a minimum of 20 working days (excluding any federal holidays) prior to any excavation or drilling:

3.12.1.1 Once approved, the approved excavation permit shall be posted onsite prior to any excavation or drilling.

3.12.1.2 Adequate containments shall be constructed around the excavation or drilling site to minimize dust, and to prevent foreign material from becoming airborne, and intrusion on or into existing equipment in the vicinity.

3.12.1.3 Water used during the concrete cutting or drilling process may be considered hazardous waste. Coordinate pH testing of the water used during any concrete cutting or drilling process with the receiving activity TPOC to determine the proper disposal procedure.

3.12.2 Structural installation. The contractor shall accurately set, align, plumb, field connect with sufficient bolts, or weld all structural steel required to make installed equipment permanent. Temporary bracing shall be provided, and subsequently removed, as necessary.

3.12.3 Mechanical installation. The contractor shall provide all labor, fluids, piping, interconnecting hoses, and any other materials to move, locate, set level, align, lubricate, and make ready to operate all equipment required by this contract.

3.12.4 Electrical installation. The contractor shall provide all labor, wiring, cables, disconnects, connectors, and any other materials for complete installation of any requisite electrical equipment. Installation shall include necessary power, control, and interconnecting wiring installed in conduit.

3.12.5 Installation utilities. The Government will make available reasonable amounts of shop air (80-90 psi) and electricity (120 VAC) adjacent to the assembly site at no cost to the contractor. The contractor shall be responsible for any costs incurred in connecting, converting and transferring the utilities to the work.

3.12.6 Lifting and rigger services. The contractor shall provide all material handling and lifting equipment, rigging support services, and other support equipment (such as cranes, forklifts, Bobcats, man-lifts, etc.) necessary for continuous support of the installation and shall provide qualified personnel to operate it.

NOTE: The use of privately owned cranes, multi-purpose machines, material handling equipment, or other construction equipment that may be used in a crane-like application to lift suspended loads on Shipyard property by contractor personnel at the installation site is restricted (see NAVFAC P-307 Management of Weight Handling Equipment for information and forms). Contractors requiring this type of equipment in the performance of this contract shall provide the Government with sufficient information including compliance certification, crane certification, operator qualifications, crane wire certification, crane manufacturer documentation showing maximum axle loads in a travel configuration, crane manufacturer documentation showing maximum outrigger loads (loaded and unloaded), loads, locations, time, etc. at least 10 business days (excluding any federal holidays) in advance for arranging Government inspection services and approvals.

3.12.7 Field supervisor. The contractor shall provide a fulltime (start of installation to final acceptance of the equipment) field supervisor to direct equipment arrival, off-loading, installation, testing, and training. The field supervisor shall have full authority to implement field decisions in an expeditious manner. No work shall be accomplished when the field supervisor is not in the immediate work area.

3.12.8 Arrival of personnel. The receiving activity TPOC shall be notified not less than 48 hours prior to the arrival at the site of the contractor's installation personnel or any equipment associated with this contract.

3.12.9 Storage. Lay-down area will be provided within the vicinity of installation site for storage of contractor materials and tools. The contractor shall submit an area outage request to the receiving activity TPOC. The area outage request form can be obtained from the receiving activity TPOC. The outage approval process can take up to 20 days for approval. The Government does not accept responsibility for security of contractor's materials or tools. The area must be kept clean and orderly, free of rags, paper and other debris. Failure to maintain area in a clean condition may result in the loss of the area. The contractor shall be responsible to restore the storage area to original condition after use.

3.12.10 Shipment of materials. Shipment of materials shall be coordinated with site preparation and installation. Material transportation from the manufacturer's facility to the work site shall be the responsibility of the contractor. Limited secured storage areas at the facility will not permit the Government to store material for extended periods of time. Early shipment of materials, without the permission of the receiving activity shall be refused.

3.12.11 Painting. The contractor shall provide all labor, equipment, and material to properly paint all devices and equipment that form a part of the installation. Painting shall include touch-up of existing equipment/machinery, surfaces, and painted shop areas affected or disturbed during the equipment installation.

3.12.12 Known hazardous materials. The Government will be responsible to inform the contractor of any known asbestos or other hazardous substances associated with the installation site.

3.13 Training. On site personnel training shall occur within 10 calendar days after satisfactory completion of OSHA approved certification, operational tests at destination, and acceptance testing of the fire sprinkler system. Training shall be scheduled and tailored by mutual agreement between the contractor and the receiving activity. The services of a qualified representative(s), who is an American citizen of good standing and repute and proficient in the

English language, shall be provided for specialized training to familiarize Receiving Activity personnel with the fire sprinkler system to help ensure reliable performance and maximum service life, during normal usage. The training shall be performed at Puget Sound Naval Shipyard and shall be between 7:20 am and 3:30 pm Monday through Friday excluding any federal holidays. All printed training aids shall be in the English language, be supplied at no additional cost, and shall become property of the Government at the completion of training. The entire contractor cost of providing the training (including travel, per diem, etc.) shall be covered by this contract.

3.13.1 Federal Fire Department personnel. Training shall be provided for up to 5 (five) Federal Fire Department personnel. Training shall include preparation of equipment for operation, actual, safe operation of the equipment, all attachments and accessories.

3.13.2 Fire Alarm Technicians. Training shall be provided for up to 4 (four) Fire Alarm Technicians. Training shall include trouble-shooting and methods of correction if the equipment malfunctions, with particular emphasis on minimizing equipment down time.

3.14 Receiving activity technical point of contact (TPOC). The TPOC at the receiving activity will be provided after contract award. The receiving activity TPOC shall serve as the contractor's primary contact for all interaction with other Shipyard and Government activities. For issues regarding cost and/or schedule contact the appropriate Contracting Officer.

4. VERIFICATION

4.1 Responsibility for inspection. The contractor shall be responsible for the performance of all inspection and tests as specified herein. Only supplies that totally conform to the specifications shall be offered for inspection and test. The Government reserves the right to perform any of the inspections set forth in the purchase description, where such inspections are deemed necessary to assure supplies and services conform to the prescribed requirements.

4.2 Responsibility for compliance. All items shall meet all requirements of sections 3 and 4. The inspection(s) set forth in this specification shall become part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of assuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspections, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements; however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

4.3 Final inspection/acceptance test (destination). The contractor shall perform an inspection of the delivered and installed equipment for mechanical and electrical integrity. The Government may perform an inspection of the equipment for the following:

a. All welds for integrity and appearance
b. Surfaces examined for sharp edges and burrs
c. Fasteners checked for tightness and if fixed to prevent loosening due to vibration
d. Paint checked for flaking and blistering
e. Electrical requirements for compliance to the National Electrical Code (via contractor submitted test data reports and/or field evaluation reports)
f. The fit of parts with particular reference to the interchangeability of those which are likely to require replacement

4.3.1 Upon satisfactory completion of the inspection requirements above, the contractor shall coordinate testing of the fire sprinkler system components with the Government.

a. The contractor shall demonstrate the ability of the equipment to perform as required in Section 3.
b. All equipment functions shall be exercised to the extent necessary to prove proper operation in accordance with specification requirements.
c. The system shall function, without failure, for the duration of this test period.
d. If a failure occurs during the test period, repairs shall be immediately addressed by the contractor, and the tests shall be restarted from the first test.
e. Three (3) failures without completion of the test period shall be considered cause for rejection of the system.

f. For the purpose of this test, a "failure" is defined as any equipment malfunction which requires remedial action to restore the system to full operation in accordance with contract specifications. Faults will be duly recorded and presented to the contractor for rectification.

4.3.2 Final acceptance. Final acceptance of the equipment specified herein will be dependent upon satisfactory completion of delivery, installation, testing of the fire sprinkler system, OSHA Approved Certification, and on-site training.